

DEPARTMENT OF THE NAVY BASE REALIGNMENT AND CLOSURE PROGRAM MANAGEMENT OFFICE, NORTHEAST 4911 SOUTH BROAD STREET PHILADELPHIA, PA 19112-1303

5090 BPMO NE/TB Ser 08-193 August 12, 2008

Mr. Michael J. Daly Remedial Project Manager Federal Facilities Superfund Section U.S. Environmental Protection Agency (EPA) 1 Congress Street, Suite 1100 (HBT) Boston, MA 02114-2023

Ms. Claudia Sait
Remedial Project Manager
Maine Department of Environmental Protection (MEDEP)
Bureau of Remediation and Waste Management
17 State House Station
Augusta, ME 04333-0017

Dear Mr. Daly and Ms. Sait:

SUBJECT: NAVY RESPONSES TO REGULATOR COMMENTS ON DRAFT SITE 9 MONITORING EVENT 30 REPORT, APRIL 2007, NAVAL AIR STATION (NAS) BRUNSWICK, MAINE

Enclosed you will find Navy responses to regulator comments on the Draft Site 9 Monitoring Event 30 Report, April 2007, Naval Air Station (NAS) Brunswick, Maine. These responses are provided for your concurrence.

If you have any questions or comments, please contact the Navy's Remedial Project Manager, Todd Bober at (215) 897-4911.

Sincerely,

Paul F. Burgio

BRAC Environmental Coordinator By direction of BRAC PMO

Enclosure:

Navy Responses to Regulator Comments on Draft Site 9 Monitoring Event 30 Report, April 2007, NAS Brunswick, Maine Copy to:

MEDEP (C. Evans)

Gannet-Fleming (D. McTigue)

NASB (L. Joy, M. Fagan)

Lepage Environmental (C. Lepage)

NAVFAC MIDLANT (T. Bober)

NAVFAC ATLANTIC (A.Van Dercook, B. Capito)

TtNUS (L. Klink, C. Race)

ECC (A. Easterday, G. Calderone, C. Guido, J. Kiker, J. Donovan)

Copy to: (w/o encl)

BRAC PMO NE (P. Burgio)

NAVFAC ATLANTIC (D. Barclift)

BACSE (E. Benedikt, C. Warren)

CO NASB (CAPT Fitzgerald)

RAB Brunswick Representative (S. Johnson)

RAB Harpswell Representative (D. Chipman)

MRRA (V. Boundy)

Responses to Comments Provided by the State of Maine, Department of Environmental Protection Agency on Site 9 Monitoring Event 30 (April 2007) Draft Report, August 2007 Naval Air Station, Brunswick, Maine

Reviewer:

Ms. Claudia Sait, MEDEP Project Manager

Date:

January 2, 2008

Respondent:

Navy

Date:

August 12, 2008

Comment #	Location	Comment .	Response
1	General	Conclusions based on this monitoring event (ME) are limited by the lack of data for wells decommissioned due to the ash landfill excavation, and by data gaps identified in previous ME reports, specifically in the vicinity of MW-NASB-076 and in the southwest corner of the site. Efforts to close these gaps are completed or planned for the near future, and the ash landfill removal north of Neptune Drive should be completed in the upcoming year. Pending identification of ash south of Neptune Drive that may trigger additional soil removal, MEDEP expects the monitoring network will be re-established as soon as the ash removal and site restoration is complete, hopefully in 2008.	install monitoring wells at Site 09 during Fall 2008.
2	General	The data collected are generally consistent with previous rounds, with low chlorinated VOC detections at MW-NASB-074 and MW-NASB-227 and DRO detected at MW-NASB-074 and MW-NASB-076 near the impoundment ponds at the southern end of the site. The DRO detections exceed the Maine Maximum Exposure Guideline (MEG) of 50 µg/L, but are less than 100 µg/L. No vinyl chloride was detected this round. The Analytical Data Quality Review indicates that overall the data were acceptable this round, and were qualified as needed.	Thank you for your comment; no change to the document is necessary.

Comment #	· Location	Comment	Response
3	General	Based on the data from the ash landfill removal stakeholders should consider whether metals should be included in the Long Term Monitoring.	It is recommended that this topic be further discussed with the Project Stakeholders. The contaminants of concern at Site 9 are VOCs in groundwater and the need to include metals in the LTMP would need to be further warranted.
. 4	Section 1.0	The Navy must note that four out of the twelve monitoring wells for this site have been decommissioned as part of the ash landfill removal and that this reduced monitoring limits the effectiveness of the long term monitoring, but these wells will be re-established once the removal is complete.	The following text will be added to Section 1.0 "Due to the recent soil removal action at Site 9, four wells (MW-NASB-069, MW-NASB-079, MW-NASB-080, and MW-NASB-021) were decommissioned and are no longer monitored. It is important to note, however, that the Navy's removal action has resulted in removal of the source of contamination and it is anticipated that groundwater quality will improve. Reinstallation of monitoring wells at site 09 during Fall 2008 should demonstrate the value of this removal action.
5	Section 1.2, Figure 1-3, and Table 1-1, 1-2 and 1-3	 a.) MEDEP appreciates the inclusion of the NEX wells in the gauging program. If possible MEDEP would appreciate if a figure could be included showing the water elevations across both the sites. b.) Based on MEDEP's understanding of the excavation extent and from the ME-28 Table 1-1, MW-NASB-081 was decommissioned to make room for soil removal. The well is omitted from Table 1-1 this round, but it appears on Table 1-2 with the groundwater elevation data. It is possible the elevation data reported for MW-NASB-081 is actually from MW-NASB-020, please confirm and revise the tables and figure, as needed. 	a) Concur. Figure 1-3 will be re-drawn to include the NEX wells and their water levels. b) MW-NASB-081 was believed to be destroyed as of January 2008 (based on excavation reports). During a site visit to determine a proper response to this comment MW-NASB-081 was found still intact (see photo at end of comments). MW-NASB-020 was unable to be found, possibly covered with excavation soil.
6	Section 1.4 and 1.5 and Table 1-1	 a.) Please fill in the metals analyses category for the seep/surface water/sediment locations. b.) Please revise to show that MW-NASB-022, MW-NASB-072 and MW-NASB-227 were sampled by aqueous diffusion sample (ADS) methods. 	Concur. Table 1-1 will be edited as requested.
7	Section 1.7	"No apparent matrix bias for constituents" This is a poorly constructed sentence and lacks a verb. Please revise.	Concur. This sentence will be changed to read "There were no apparent matrix biases for all analyzed constituents of concern."

Tables 1-4 and 1-5, Appendix A b.) It is notable that there is a very wide range of values for some field parameters. Temperature in groundwater ranges from 4.8 to 12.5 degrees C, and dissolved oxygen ranges from much less than 1 to greater than 16 mg/L. Calibration logs indicate nothing notable, and the variable readings are not traceable to different sample methods (low-flow or aqueous diffusion sample ADS). The field notes do indicate snow was falling during at least a portion of the sampling, it is possible the meters or flow-through cell were affected by the precipitation. Readings were generally similar between wells in the previous round. 9 Section 2.3.1, Σ1, 2 dichloroethene (IDCE) and Σνίην] chloride graphic was removed. Since MW-NASB-069 was the well with vinyl chloride graphic or indicate a trend when the wells sampled are changing through time. 9 Please revise the figure to include trichloroethene (TCE) data and add a notation to the text and figure indicating when MW-NASB-069 (was removed. Since MW-NASB-069 was the well with vinyl chloride graphic or indicate a trend when the wells sampled are changing through time. 10 Section 2.3.1, Σ1, 2 dichloroethene (IDCE) and Σνίην] chloride at MW-NASB-069 was the well with vinyl chloride graphic or indicate a trend when the wells sampled are changing through time. 2 Section 2.3.1, Σ1, 2 dichloroethene (IDCE) and Σνίην] chloride at MW-NASB-069 was the well with vinyl chloride graphic or indicate a trend when the wells sampled are changing through time. 2 Section 2.3.1, Σ1, 2 3 Please revise the figure to include trichloroethene (TCE) data and add a notation to the text and figure indicating when MW-NASB-069 was the well with vinyl chloride graphic handle and add a notation to the text and figure indicating when MW-NASB-069 was the well with vinyl chloride graphic handle and add a notation to the text and figure and add a notation to the text and figure and add a notation to the text and figure and add an otation to the text and figure and add an o	Comment #	Location	Comment	Response
field parameters. Temperature in groundwater ranges from 4.8 to 12.5 degrees C, and dissolved oxygen ranges from much less than 1 to greater than 16 mg/L. Calibration logs indicate nothing notable, and the variable readings are not traceable to different sample methods (low-flow or aqueous diffusion sample ADS). The field notes do indicate snow was falling during at least a portion of the sampling, it is possible the meters or flow-through cell were affected by the precipitation. Readings were generally similar between wells in the previous round. a.) Please revise the figure to include trichloroethene (TCE) data and add a notation to the text and figure indicating when MW-NASB-069 was removed. Since MW-NASB-069 was the well with vinyl chloride graphic concentrations far above any other well, it is disingenuous to indicate a trend when the wells sampled are changing through time. b.) The detection of vinyl chloride at MW-NASB-076 (January 2006, 1.2 μg/L) is missing from the figure, please revise. c.) As noted in MEDEP's ME29 comments, this figure would be improved by looking at individual locations and additional VOCs such as TCE. document is necessary.	8	Tables 1-4 and 1-5,		MW-NASB-072 and MW-NASB-227 were sampled by ADS only, not low-flow will be added to the Notes section
dichloroethene (DCE) and Σvinyl chloride graphic holoride graphic chloride graphic holoride concentrations far above any other well, it is disingenuous to indicate a trend when the wells sampled are changing through time. add a notation to the text and figure indicating when MW-NASB-069 was the well with vinyl chloride concentrations far above any other well, it is disingenuous to indicate a trend when the wells sampled are changing through time. ASB-069, MW-NASB-071, MW-NASB-076, and MN-NASB-075, MW-NASB-076, and MN-NASB-227 will be used in the total concentrate calculations for this figure as these are the wells that been consistently sampled during each monitoring esince 1995. It will be noted on the graph when MN-NASB-022 and MW-NASB-022 and MW-NASB-023 and MW-NASB-024 in the total concentrate calculations for this figure as these are the wells that been consistently sampled during each monitoring wells MW-NASB-076, and MN-NASB-076, MW-NASB-076, and MN-NASB-076, MW-NASB-076, and MN-NASB-076, MW-NASB-076, and MN-NASB-076, MW-NASB-076, MW-NASB-076, and MN-NASB-076, MW-NASB-076, MW-NASB-076, MW-NASB-076, MW-NASB-076, MW-NASB-076, MW-NASB-076, MW-NASB-076, MN-NASB-076, MW-NASB-076, MW-NASB-076, MN-NASB-076, MN-N			field parameters. Temperature in groundwater ranges from 4.8 to 12.5 degrees C, and dissolved oxygen ranges from much less than 1 to greater than 16 mg/L. Calibration logs indicate nothing notable, and the variable readings are not traceable to different sample methods (low-flow or aqueous diffusion sample ADS). The field notes do indicate snow was falling during at least a portion of the sampling, it is possible the meters or flow-through cell were affected by the precipitation. Readings were generally similar between wells	
 c.) As noted in MEDEP's ME29 comments, this figure would be improved by looking at individual locations and additional VOCs such as TCE. c.) As noted in MEDEP's ME29 comments, this figure would be improved by looking at individual locations and additional VOCs such as TCE. c.) Figure 2-1 will be changed to display graphs of DCE, TCE, and vinyl chloride for each of the vine mentioned above. The text boxes displaying vinyl chloride results will be removed. These changes will better display detections at the site throughout the site's monitor. 	9	dichloroethene (DCE) and Σvinyl	add a notation to the text and figure indicating when MW-NASB-069 was removed. Since MW-NASB-069 was the well with vinyl chloride concentrations far above any other well, it is disingenuous to	a) Concur. The figure will be edited as requested. Only the results from monitoring wells MW-NASB-022, MW-NASB-069, MW-NASB-071, MW-NASB-072, MW-NASB-074, MW-NASB-075, MW-NASB-076, and MW-NASB-227 will be used in the total concentration calculations for this figure as these are the wells that have been consistently sampled during each monitoring event since 1995. It will be noted on the graph when MW-NASB-022 and MW-NASB-227 were added to the monitoring program in 1998, and when MW-NASB-069 was decommissioned.
improved by looking at individual locations and additional VOCs such as TCE. DCE, TCE, and vinyl chloride for each of the vine mentioned above. The text boxes displaying vinyl chloride results will be removed. These changes will better display detections at the site throughout the site's monitor			· · · · · · · · · · · · · · · · · · ·	b) This detection will be included in the calculations for this figure.
			improved by looking at individual locations and additional VOCs	c) Figure 2-1 will be changed to display graphs of 1,2-DCE, TCE, and vinyl chloride for each of the wells mentioned above. The text boxes displaying vinyl chloride results will be removed. These changes will better display detections at the site throughout the site's monitoring history.

Comment #	Location	Comment	Response
	304	d.) Para 3; "The current active wells have non-detect results for vinyl chloride."	d) Concur. The vinyl chloride detection limit will be stated in the text.
		While this may be true, it should also be noted that 8260B SIM is not being used to gain the lowest detection limit which still is not low enough to meet the Maine Maximum Exposure Guideline of 0.15 µg/L. Therefore please cite the detection limit being used.	
10	Section 2.3.1, well chemical summaries	Please revise the text for the DRO detections. Please put the units in mg/L, so the values for MW-NASB-074 and MW-NASB-076 are easily discerned to be over the MEG.	Concur. The DRO results will be converted to units of mg/L.
11	Section 3.1	a.) The report must clearly indicate that due to the number of wells decommissioned as part of the ash landfill removal action that the effectiveness of the long term monitoring is limited until such time as the monitoring network can be re-established.	a) The following sentence will be added to Section 3.1: "It should be noted that, due to the number of wells decommissioned as part of the ash landfill removal action, the effectiveness of long term monitoring cannot be fully evaluated until the monitoring network can be reestablished." It is important to note, however, that the Navy's removal action has resulted in removal of the source of contamination and it is anticipated that groundwater quality will improve. Reinstallation of monitoring wells at site 09 during Fall 2008 should demonstrate the value of this removal action.
		b.) The objectives as written do not follow the Record of Decision goals which are reiterated in the current Long Term Monitoring Plan (October 2005). The objectives must closely mimic the goals in these documents. Please revise in this report and all future ME reports.	b) Section 3.1 will be rewritten to more closely follow the goals of the Record of Decision, which were re-iterated in the current LTMP.
12	Section 3.1, Bullets 1 and 2	MEDEP can not fully agree these objectives are completely met at present based on the potential pathways near MW-NASB-076 and near S9-B10 leaving data gaps. These potential data gaps are noteworthy, and MEDEP expects they will be rectified shortly.	Thank you for your comment; no change to the document is necessary.

Comment #	Location	Comment	Response
13	Section 3.1, Bullet 4	MEDEP anticipates the ongoing ash and soil removal will greatly enhance the attenuation of the vinyl chloride migrating across the central part of the site. As noted, the direct push investigation and the new screen at depth near MW-NASB-076 will provide data to support this evaluation.	Thank you for your comment; no change to the document is necessary.
14	Section 3.1, Bullet 5	The data for Site 9 indicate that screening criteria are exceeded for several metals in surface water, sediment and seeps associated with the site. This is the case at several other sites at NASB, and stakeholders will eventually need to discuss whether these sorts of exceedences require additional corrective measures, or if the background study indicates it is typical groundwater to surface water discharge chemistry.	necessary.
15	Section 3.2, Bullet 1	MEDEP agrees with the conclusion with the additional possibility that the pending Site 9 investigation may generate data that indicates other revisions to the monitoring are needed.	Thank you for your comment. The following statement will be added: "The pending Site 9 investigation may generate data that indicate other revisions to the long-term monitoring are needed."
16	Section 3.2, Bullet 2	The statement must be revised to reflect that the soil and ash removal to date has been north of Neptune Drive.	Concur. This Bullet 2 will be corrected as requested.
17	Table 2-1 and Appendix B	The reporting limit for diesel-range organics for sample MW-NASB-075 (0.08 mg/L) exceeds the Maine MEG of 0.05 mg/L, although the detection limit is listed in the appendix as 0.05 mg/L. This value contradicts the electronic data deliverable that reported 0.04 mg/L as the reporting limit. Please confirm the detection limits	Concur. The MDL for DRO is 0.05 mg/L which is equal to the Maine MEG for DRO. In this report, non-detects are reported to the RL which is 0.08 mg/L. The Navy does not agree that the EDD reported the MDL as 0.04 mg/L. The EDDs for this monitoring event agree
18	Table 2-1	and reporting was for these analysis and revise the table as needed. The total VOC (TVOC) value for wells with detections of cis 1,2 dichloroethene is incorrect, because the table also lists total 1,2 dichloroethene. As a result the detection is "double-counted" in the TVOC calculation. This also affects the trend graphs for those wells. Please revise the table and figures.	with the numbers listed above for the MDL and RL. Concur. The total VOCs will be recalculated and Table 2- 1 and Appendix D will be corrected accordingly.
19	Appendix A and Table 1-2	The field notes indicate a reading was taken at both staff gauges, however table 1-2 only lists a depth to water for SG-1C. Also the depth to water in the same table does not match the field notation for SG-1C. Please explain and revise the table and text, as needed.	Staff gauge SG-1C was measured on April 3, 2007. Staff gauge SG-2 was damaged and could not be gauged. Staff gauge SG-2 was replaced on April 25, 2007, and the water levels at SG-1C and SG-2 were measured on that same date. SG-2 was not surveyed, so the water elevation above MSL could not be calculated. All staff gauge measurements will be included on Table 1-2.

Comment #	Location	Comment	Response
20	Appendix D	The trend graphs are improved with the new format, but where applicable for all wells trans 1,2 DCE should be dropped from the graphs and total 1,2 DCE added. MEDEP made similar comments on the ME29 report. Trichlorofluoromethane should be added to the graphs for MW-NASB-075 and MW-NASB-072, to clarify the total VOC values plotted. The graphs for MW-NASB-022 and MW-NASB-227 need to be corrected to show the data were collected by ADS not low-flow.	made.
END OF COMMENTS			



Looking south at MW-NASB-081 on the perimeter of removal action activity area.